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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/228,954	01/12/1999	ALONZO M. BURNS JR.	971286A	7883

7590 12/05/2003

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EXAMINER

JUSKA, CHERYL ANN

ART UNIT	PAPER NUMBER
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1771

DATE MAILED: 12/05/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/228,954

Applicant(s)

BURNS ET AL.

Examiner

Cheryl Juska

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 September 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 23-34 and 59-68 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 23-34 and 59-68 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

1. In view of the Appeal Brief filed on September 8, 2003, PROSECUTION IS HEREBY REOPENED. The reopening is in part due to the omission of a prior art rejection for claim 60, in part due to the convincing arguments regarding the Gerace reference, and in part due to the finding of the new Schilling reference. A new prior art rejection is set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) request reinstatement of the appeal.

If reinstatement of the appeal is requested, such request must be accompanied by a supplemental appeal brief, but no new amendments, affidavits (37 CFR 1.130, 1.131 or 1.132) or other evidence are permitted. See 37 CFR 1.193(b)(2).

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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3. Claims 23, 24, 26, 29-31, and 63 are rejected under 35 USC 103(a) as being unpatentable over US 5,656,109 issued to Schilling et al. in view of US 5,665,461 issued to Wong et al. and US 3,819,463 issued to Ervin et al.

Applicant claims a textile substrate comprising a pile surface, a primary backing, and a secondary backing, wherein said secondary backing comprises polymeric microspheres and a thermoplastic material of a vinyl compound and a plasticizer.

Schilling discloses a decorative floor covering comprising a textile substrate of a face layer, a primary backing, an adhesive backcoat layer or pre-coat layer, and a secondary backing (col. 2, lines 61-67). The face layer is preferably a tufted or pile carpet (col. 3, line 62-col. 4, line 1). The adhesive backcoat is preferably a thermoplastic resin, such as a vinyl compound with a plasticizer (col. 4, lines 45-65). The secondary backing may be a foam backing of a thermoplastic polymer such as polyvinyl chloride (PVC) (col. 5, lines 35-39). Said secondary backing may contain organic or inorganic fillers, such as inorganic microspheres (col. 5, lines 40-52).

Thus, Schilling teaches the invention of claim 23 with the exception that the microspheres are polymeric. However, the use of polymeric microspheres as an alternative to inorganic microspheres is well known. For example, Wong teaches the equivalence of polymeric microspheres and inorganic microspheres as a filler for foam materials (col. 3, line 65-col. 4, lines 4-21). Additionally, Ervin teaches a thermoplastic carpet backing including expandable polymeric microspheres (abstract). Thus, it would have been obvious to one skilled in the art to substitute polymeric microspheres for the inorganic microspheres of the Schilling

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invention, with the expectation of obtaining a suitable foam carpet backing. Therefore, claims 23, 24, 26, and 63 are rejected as being obvious over the cited prior art.

With respect to claims 29-31, although the cited art does not explicitly teach the claimed carpet density or delamination values, it is reasonable to presume that a carpet made according to said combination of prior art would meet these claimed properties. Support for said presumption is found in the use of similar materials (i.e., carpet face fibers, primary backing, and PVC plastisol foam backing with microspheres) and the like end products (i.e., a carpet with a microsphere-filled foam backing). The burden is shifted to applicant to prove otherwise. Therefore, claims 29-31 are rejected.

4. Claims 25, 64, and 65 are rejected under 35 USC 103(a) as being unpatentable over the cited Schilling, Wong, and Ervin references and in further view of *Carpet Substrates*, by P. Ellis, 1973, Chapters 7 and 8, pages 71-98.

Schilling is drawn to carpets in general, but does not explicitly teach the carpet is a broadloom, tile, or wide roll carpet. However, these specific forms of carpet are well known in the carpet industry. For example, Ellis teaches PVC backings are suited for conventional tufted broadloom carpets and/or wide roll carpets (page 75, paragraphs 2-5), as well as carpet tiles (page 85, lines 6-13 and page 87, paragraph 4-page 88, paragraph 1). Thus, it would have been obvious to one skilled in the art to employ the Schilling carpet in the form of broadloom, wide roll, or tile form, since said carpet forms are well known in the art as standard carpet forms.

5. Claims 27 and 28 are rejected under 35 USC 103(a) as being unpatentable over the cited Schilling, Wong, and Ervin references in further view of US 5,545,276 issued to Higgins.

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Schilling is silent with respect to the addition of an intermediate layer and a reinforcing layer. However, said layers are well known in the art. For example, Higgins teaches a carpet comprising (a) a pile layer, (b) a primary backing, (c) an adhesive backcoat, (d) an adhesive layer, (e) a reinforcement layer, (f) a foam layer, and (g) a secondary backing. Therefore, it would have been obvious to employ additional layers in the carpet of Schilling in order to enhance the dimensional stability of the carpet.

6. Claims 32-34 and 58-61 are rejected under 35 USC 103(a) as being unpatentable over the cited Schilling, Wong, and Ervin references in further view of US 3,661,691 issued to Slosberg.

Although Schilling teaches a PVC foam backing, the reference is silent with respect to how said foam is produced. However, casting a foam composition containing a blowing agent onto a carpet back is known in the art as a conventional method of producing a foam. For example, Slosberg teaches conventional secondary carpet backing may be made of a PVC foam which is chemically activated (i.e., containing a blowing agent) (col. 2, lines 20-21). Said foam backing is "prepared by casting a vinyl chloride resin plastisol containing a blowing agent onto the back of the carpet and heating to expand and fuse the plastisol" (col. 2, lines 21-24). Thus, it would have been obvious to one skilled in the art to employ a blowing agent and to cast the foam onto the carpet back in order to produce the foam taught by Schilling, since said method is known in the art as convention. Therefore, claims 32, 58, and 61 are rejected.

With respect to claims 34 and 59, the cited prior art does not explicitly teach the amount of the blowing agent or the expansion ratio. However, it would have been obvious to one skilled in the art to employ the blowing agent in the amount recited by Applicant, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the

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optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233. Additionally, it is noted that the amount of blowing agent would directly affect the expansion ratio. As such, one skilled in the art would have readily be able to determine the amount of blow agent required, based upon the desired expansion ratio or thickness and density of the foam. Determination of said thickness and density would be dependent upon the desired final product and its utility. Therefore, claims 34 and 59 are rejected as being obvious over the cited prior art.

With respect to claims 33 and 60, it is asserted that although the cited art does not explicitly teach the claimed delamination values, it is reasonable to presume that a carpet made according to said combination of prior art would meet these claimed properties. Support for said presumption is found in the use of similar materials (i.e., carpet face fibers, primary backing, and PVC plastisol foam backing with microspheres) and the like end products (i.e., a carpet with a microsphere-filled foam backing). The burden is shifted to applicant to prove otherwise. Therefore, claims 33 and 60 are rejected.

7. Claims 66 and 67 are rejected under 35 USC 103(a) as being unpatentable over the cited Schilling, Wong, and Ervin references in further view of US 3,661,691 issued to Slosberg.

Claim 68 is rejected under 35 USC 103(a) as being unpatentable over US 5,656,109 issued to Schilling et al. in view of Wong and Ervin, as applied to claim 63 above, and in further view of US 3,661,691 issued to Slosberg.

With respect to claims 66-68, Slosberg also teaches the PVC foam secondary backings are commonly closed cell foams, which enable outdoor use of the carpet (i.e., water resistance) and provide high resiliency, good mechanical strength, and improved fire resistance than other foams (col. 2, lines 3-12). Thus, it would have been obvious to one skilled in the art to make the

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foam of Schilling a closed cell foam in order to enhance the resiliency, strength, and fire resistance, and to expand the applications of the carpet to outdoor use. Therefore, claims 66-68 are rejected over the cited prior art.

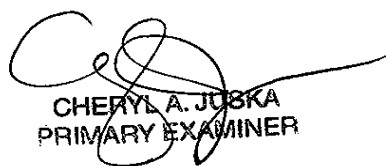
Conclusion

8. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Cheryl Juska whose telephone number is 703-305-4472. The Examiner can normally be reached on Monday-Friday 10am-6pm.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Terrel Morris can be reached on 703-308-2414. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

cj
December 1, 2003


CHERYL A. JUSKA
PRIMARY EXAMINER